

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

AFFYMETRIX, INC.,  
a California corporation,

Plaintiff,

v.

SYNTENI, INC., a Delaware corporation  
and INCYTE PHARMACEUTICALS,  
INC., a Delaware corporation,

Defendants.

C. 98-4508

Civil Action No. 98-6

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff, Affymetrix, Inc. ("Affymetrix"), hereby demands a jury trial and for its complaint against defendants Synteni, Inc. ("Synteni") and Incyte Pharmaceuticals, Inc. ("Incyte"), alleges:

NATURE OF THE ACTION

This is an action for permanent injunctive relief and damages arising out of defendants' patent infringement.

THE PARTIES

1. Plaintiff Affymetrix is a corporation organized and existing under the laws of the State of California, and has its principal place of business at 3380 Central Expressway, Santa Clara, California 95051.

I hereby certify that the annexed instrument is a true and correct copy of the original on file in my office  
ATTEST

RICHARD W. WIEKING  
Clerk, U.S. District Court  
Northern District of California  
By Richard W. Wiegking Deputy Clerk  
Date DEC 01 1998

2. On information and belief, defendant Synteni is a corporation organized and existing under the laws of the State of Delaware, and has its principal place of business at 6519 Dumbarton Circle, Fremont, California 94555.

3. On information and belief, defendant Incyte is a corporation organized and existing under the laws of the State of Delaware, and has its principal place of business at 3174 Porter Drive, Palo Alto, California 94304.

#### **JURISDICTION AND VENUE**

4. This lawsuit is an action for patent infringement brought pursuant to Title 35 of the United States Code. This Court thus has jurisdiction pursuant to 35 U.S.C. §§ 101, et seq. (the "Patent Statutes"); and pursuant to 28 U.S.C. §§ 1331 and 1338.

5. The defendants are incorporated in this district, and thus reside within this judicial district, as provided by 28 U.S.C. § 1391(c). Accordingly, venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b).

#### **FACTUAL BACKGROUND**

6. The technology at issue in this case pertains to a revolutionary molecular biology tool for studying genetic characteristics. This technology uses a large number of biological compounds, such as DNA sequences, arranged in an array placed on a very small solid surface, such as a glass chip. Thousands of such sequences are arranged in an area about the size of a dime. This "high density array" can then be analyzed for a variety of purposes to study genetic properties.

7. Affymetrix first began operations in 1991 as a division of another company, Affymax N.V. ("Affymax"). Affymetrix was separately incorporated in 1992 and began operating independently as a wholly owned subsidiary of Affymax in 1993.

8. Affymetrix began operating independently in order to pursue the groundbreaking research which was developed in the late 1980s by a team of four award-winning Affymax inventors. This technology eventually led to the high density arrays at issue in this case. The potential impact of Affymetrix' proprietary technology on the future of human disease is anticipated to be profound.

9. Affymetrix' high density array technology has been the subject of numerous awards and prestigious technical publications.

10. Affymetrix' technology takes advantage of the fact that, for example, double-stranded DNA is built like a zipper that consists of four distinct nucleotides (referred to as A, T, G and C) which join together in a specific order. Guanine (G) of one strand binds only to cytosine (C) of the other strand, while similarly adenine (A) of one strand binds only to thymine (T) of the other strand. Affymetrix' system provides one half of the zipper molecule on a small wafer. A biological sample obtained from a patient or research experiment provides the other half of the zipper to complete an analysis using a high density array.

11. One of the keys to Affymetrix' technology is its high density array, sold under the trademark "GeneChip." The GeneChip high density arrays are sold in conjunction with reagents and instructions for analyzing test samples against the arrays, as well as the sophisticated technology for analyzing these arrays and managing the genetic information acquired from the test samples. The applications of the GeneChip system are very broad, allowing for research into the genetic bases of disease as well as

the diagnosis, monitoring and treatment of any disease or genetic characteristic for which nucleic acids are implicated.

12. In order to analyze a test sample, such as for the purpose of monitoring the expression of particular nucleic acids in a sample, the nucleic acids in the sample are converted to single-stranded nucleic acid and tagged with fluorescent markers. The prepared sample is then passed over the prepared high density array, where the relevant complementary nucleic acids bind to one another. A laser scanner is then used to detect the fluorescing probes to "read" the results from the test. Thus, as an example, the results from normal cells can readily be compared to derive information about what genes might be expressed differently in the cancerous cells.

13. On August 29, 1995, United States Letters Patent No. 5,445,934 (hereinafter the "934 patent") entitled "ARRAY OF OLIGONUCLEOTIDES ON A SOLID SUBSTRATE," naming Stephen P.A. Fodor, Michael C. Pirrung, J. Leighton Read and Lubert Stryer as inventors, and assigned to Affymax Technologies, N.V. All rights in and to the '934 patent have subsequently been assigned to Affymetrix. A true and correct copy of the '934 patent is attached as Exhibit A to this Complaint. All rights in and to the '934 patent have subsequently been assigned to Affymetrix. Affymetrix has placed the required statutory notice on all arrays manufactured and sold by Affymetrix under the '934 patent.

14. Synteni makes, uses, has offered for sale, and sells a high density array system under the trademark "GEM" for Gene Expression Micro-Array. Like the Affymetrix GeneChip system, the GEM system includes a high density array of DNA molecules bonded onto a small glass surface.

15. On information and belief, Synteni has been aware of the '934 patent since at least 1995.

16. Incyte is a public "genomics" company that generates and sells databases of genetic information. Incyte was incorporated in 1991. Incyte has worked with Affymetrix to develop customized high density arrays which relate to breast and prostrate cancer research, and other areas. Incyte has purchased such customized arrays from Affymetrix.

17. Incyte has recently announced that it has signed a definitive agreement to purchase Synteni for \$80.3 million. According to a press release dated December 23, 1997, Incyte has agreed to purchase Synteni to develop and commercialize high density arrays based on gene databases of Incyte for drug discovery research and development. Incyte and Synteni are acting as agents, each for the other.

18. On information and belief, Incyte was and is fully aware of the '934 patent.

19. On information and belief, Incyte has and will continue to develop high density arrays using Incyte's databases of gene sequences.

## COUNT I

### PATENT INFRINGEMENT

20. Plaintiff Affymetrix realleges and repeats the allegations of paragraphs 1-19 as though fully set forth herein.

21. On information and belief, without license or authorization from Affymetrix, the defendants have been infringing the '934 patent within this district and

elsewhere in the United States by making, using, selling, importing, distributing or offering for sale in the United States high density arrays covered by the '934 patent.

## **COUNT II**

### **CONTRIBUTORY PATENT INFRINGEMENT**

22. Plaintiff Affymetrix realleges and repeats the allegations of paragraphs 1-19 as though fully set forth herein.

23. On information and belief, defendants are contributorily infringing the '934 patent by making, using, selling, importing, distributing or offering for sale in the United States high density arrays which are covered by the '934 patent.

## **COUNT III**

### **INDUCEMENT OF PATENT INFRINGEMENT**

24. Plaintiff Affymetrix realleges and repeats the allegations of paragraphs 1-19 as though fully set forth herein.

25. On information and belief, defendants induce infringement of the '934 patent by making, using, selling, importing, distributing or offering for sale in the United States high density arrays which are covered by the '934 patent.

### **DAMAGE TO AFFYMETRIX AND RELIEF SOUGHT**

26. On information and belief, defendants' patent infringement has been willful and wanton and with full knowledge by defendants of the existence of the '934 patent and has and will cause irreparable damage to Affymetrix for which there is no adequate remedy at law.

27. Affymetrix has been, and still is, being damaged by the defendants' activities. Defendants will continue their activities unless enjoined by this Court.

28. Affymetrix has no adequate remedy at law. The said conduct of defendants has caused, and, if not enjoined, will continue to cause, irreparable damage to the rights of Affymetrix. Affymetrix' damages from the aforesaid actions of defendants, to the extent ascertainable, are not yet determined.

WHEREFORE, plaintiff Affymetrix respectfully demands judgment for Affymetrix, and against defendants:

A. that U.S. Patent No. 5,445,934 has been infringed by the making, using, selling, importing, distributing or offering to sell high density arrays by Synteni and Incyte;

B. that Synteni's and Incyte's infringement of U.S. Patent No. 5,445,934 is, has been and will be, willful;

C. ordering a permanent injunction enjoining Synteni and Incyte and those in privity with them from further infringement of U.S. Patent No. 5,445,934;

D. ordering that an accounting be made to establish Affymetrix' damages arising out of Synteni's and Incyte's infringing acts;

E. that the damages so ascertained be trebled and awarded to Affymetrix together with interest, including prejudgment interest, due to the willfulness of Synteni's and Incyte's acts;

F. for reasonable attorneys' fees;

G. for costs of suit; and

H. awarding Affymetrix such other and further relief as this Court may deem just and proper.

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Attorneys for Plaintiff

Dated: January 6, 1998

TO:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**REPORT ON THE  
FILING OR DETERMINATION OF AN  
ACTION REGARDING A PATENT OR  
TRADEMARK**

In Compliance with 35 § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Northern Dist of CA on the following  Patents or  Trademarks:

DOCKET NO. <b>C98-4508-DLJ</b>	DATE FILED <b>11/24/98</b>	U.S. DISTRICT COURT <b>Northern District of CA - Oakland Division</b>
PLAINTIFF <b>Affymetrix, Inc.</b>	DEFENDANT <b>Synteni, Inc.</b>	<b>SOLICITOR</b> <b>DEC 07 1998</b> <b>U.S. PATENT &amp; TRADEMARK OFFICE</b>
PATENT OR TRADEMARK NO. <b>1,445,934</b>	DATE OF PATENT OR TRADEMARK <b>Aug. 29, 1995</b>	HOLDER OF PATENT OR TRADEMARK <b>Affymax Technologies N.V.</b>
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In the above-entitled case, the following patent(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
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In the above-entitled case, the following decision has been rendered or judgment issued:

DECISION/JUDGMENT

CLERK <b>RICHARD W. WIEKING</b>	(BY) DEPUTY CLERK <b>MIRIAM HUICHAPAN</b>	DATE
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Copy 1—Upon initiation of action, mail this copy to Commissioner Copy 3—Upon termination of action, mail this copy to Commissioner  
Copy 2—Upon filing document adding patent(s), mail this copy to Commissioner Copy 4—Case file copy